

E7.3 10678
CR-132184

TYPE I PROGRESS REPORT 1 MARCH 1973 - 30 APRIL 1973

Discipline and Sub-disciplines: 8. Interpretation Technique Development
C. Classification and Pattern Recognition

- a) TITLE: Studies of Images of Short-Lived Events Using ERTS Data
Proposal No. 128
- b) PRINCIPAL INVESTIGATOR: Dr. William A. Deutschman OT-002
- c) A STATEMENT AND EXPLANATION OF ANY PROBLEMS: Our major problem is still the lag between the time when a picture is taken and the time when we see the image. We are also unable to use the cloud cover statistics reliably because a number of shots with low cloud cover have the clouds over our "events" and some with high cloud cover have "holes" where we can see the "event". We cannot wait until we can view a microfilm copy and then order the picture because the time lag would be too long.
- d) We are analyzing the events for which we have obtained scenes. These include several volcanoes, the Oakland, Calif. oil spill. We are continuing to refine our techniques for analyzing the existing scenes.
- e) Our significant results are the continued detection of short-lived events. We have currently detected and analyzed forest fires, oil spills, vegetation damage, volcanoes, storm ridges and earthquakes.
- f) N.A.
- g) None
- h) N.A.
- i) ERTS Image Descriptor Forms were submitted 21 February 1973 to Users Services on the following scenes:

PAH FIRE	1003-21355
	1037-21234
	1037-21240
	1038-21292
	1055-21234
	1055-21240
BEAR FIRE	1037-18064
	1055-18064
BIG SUR FIRE & SLIDE	1021-18174
	1057-18175
SAKURAZIMA VOLCANO	1078-01234
	1132-01242

N73-25373

Unclas
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G3/13

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(E73-10678) STUDIES OF IMAGES OF
SHORT-LIVED EVENTS USING ERTS DATA
Progress Report, 1 Mar. - 30 Apr. 1973
(Smithsonian Astrophysical Observatory)
2 p HC \$3.00

j) Listing by date of data request forms, for retrospective data:

All scenes requested - bulk black and white 70mm positive and negative transparencies for all bands.

# Scenes	Date Ordered	# Scenes	Date Received	Comments
8	1/18/73	4	3/28/73	
		4	3/29/73	
3	1/23/73	3	3/16/73	
5	2/21/73	2	3/16/73	
		3	3/20/73	
2	3/7/73	2	4/4/73	
2	3/20/73	2	4/23/73	
1	3/28/73	1	5/14/73	
2	3/30/73	2	5/14/73	
1	4/4/73	1	5/23/73	Partial shipment -
2	4/9/73			negatives only not
4	4/30/73			received as of this date
				6/6/73

No new ERTS coverage requests were made for Non-US scenes.

Continuing ERTS coverage was requested for the following Non-US scenes:

1. Funafute Atoll Formation
South Pacific
Pictures were taken 3/14/73 40% cloud cover and ordered by Users
Support 5/4/73
2. Helgafell Eruption
Iceland
Pictures were taken 3/9/73, 3/10/73, 3/11/73 but were not ordered
due to cloud cover - 100%
3. Asama Eruption
Japan
Pictures were taken 3/15/73 but were not ordered due to cloud cover -
90%

- k) As of the close of this report period the full funds required for this effort have not been received. At the present rate of expenditure the existing partial funding of \$50,000 will be depleted in the next report period. SAO has been assured by the Contracting Officer that an additional \$15,310 will be added to the contract to fully fund this effort at the negotiated value of \$65,310.